This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. (Previously presented) A compound of formula I,

wherein:

A is represented by formula II,

$$\begin{array}{c|c}
R^3 & X_2 - X_1 & H - D_1 \\
N - D_2 & N - D_2
\end{array}$$

$$\begin{array}{c|c}
R^4 & R^5
\end{array}$$
(II)

wherein:

 R^3 is hydrogen, -OH, or -(C_1 - C_7)-alkyl;

R⁴ and R⁵, independently of one another, are

- 1. hydrogen;
- 2. $-(C_1-C_7)$ -alkyl;
- 3. -OH;
- 4. $-O-(C_1-C_7)$ -alkyl;
- 5. halogen;
- 6. $-NH_2$; or
- 7. $-NO_2$;

 X_1 and X_2 , independently of one another, are selected from a carbon substituted by R^4 , wherein R^4 is as defined above, and a nitrogen, but X_1 and X_2 are not both carbon;

D₁ and D₂, independently of one another, are

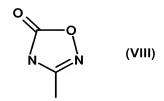
- 1. hydrogen;
- 2. $-C(O)-(C_1-C_7)-alkyl;$
- 3. -C(O)-aryl;
- 4. $-C(O)-(C_1-C_7)$ -alkyl-aryl;
- 5. $-C(O)-O-(C_1-C_7)$ -alkyl;
- 6. $-C(O)-O-(C_1-C_7)$ -alkyl-aryl; or

7.
$$-C(O)-O-(C_1-C_6)$$
-aryl; or

D₁ is hydrogen, when D₂ is

- 1. -OH;
- 2. $-O-C(O)-(C_1-C_7)$ -alkyl;
- 3. -O-C(O)-aryl; or
- 4. $-O-C(O)-(C_1-C_7)$ -alkyl-aryl; or

 D_1 and D_2 , together with the nitrogen to which they are attached, form a cycle of the formula VIII



- R¹ is 1. hydrogen;
 - 2. $-(C_1-C_7)$ -alkyl;
 - 3. -OH;
 - 4. $-O-(C_1-C_7)$ -alkyl; or
 - 5. -N-(R^6)₂, wherein R^6 is, independently of one another, hydrogen, -C(O)-aryl, -C(O)-(C₁-C₇)-alkyl-aryl, -C(O)-(C₁-C₇)-alkyl, -(C₁-C₇)-alkyl, -C(O)-N(H)-aryl, -C(O)-N(H)-(C₁-C₇)-alkyl-aryl, -(C₁-C₆)-N(H)-alkyl, -C(O)-O-aryl, -C(O)-O-(C₁-C₇)-alkyl-aryl, -C(O)-O-(C₁-C₇)-alkyl-, S(O₂)-aryl, or -S(O₂)-(C₁-C₇)-alkyl;
- R² is 1. aryl, wherein aryl is unsubstituted or mono- to tri-substituted, independently of one another, by
 - 1.1 $-CF_3$;
 - 1.2. halogen;
 - 1.3 -OH;
 - 1.4 -CN;
 - 1.5 sulfo;
 - 1.6 $-NO_2$;
 - 1.7 $-NH_2$;
 - 1.8 -O- (C_1-C_7) -alkyl;
 - 1.9 substituted amino;

- 1.10 -COOH;
- 1.11 $-(C_1-C_7)$ -alkyl;
- 1.12 carbamyl;
- 1.13 carbonyl;
- 1.14 alkoxycarbonyl;
- 1.15 methylendioxyl;
- 1.16 aryloxy, wherein aryloxy is unsubstituted or mono- to tri-substituted, independently of one another, by a substituent as defined by 1.1 to 1.15;
- 1.17 -O-(C₁-C₇)-alkyl-aryl, wherein aryl is unsubstituted or mono- to trisubstituted, independently of one another, by a substituent as defined by 1.1 to 1.15;
- 1.18 Het-group, wherein Het-group is unsubstituted or mono- to trisubstituted, independently of one another, by a substituent as defined by 1.1 to 1.15; or
- 1.19 -(C₀-C₄)-alkyl-aryl, wherein aryl is unsubstituted or mono- to trisubstituted, independently of one another, by a substituent as defined by 1.1 to 1.15;
- 2. hydrogen;
- 3. Het-group, wherein the Het-group is unsubstituted or mono- to tri-substituted, independently of one another, by a substituent as defined by 1.1 to 1.19 above;
- 4. $-(CH_2)_m-Y_n-(CH_2)_o$ -aryl, in which

m, n, and o are, independently of one another, 0, 1, or 2, provided that at least one of m, n, and o is not 0;

aryl is unsubstituted or mono- to tri-substituted, independently of one another, by a substituent as defined by 1.1 to 1.19 above; and Y is -O-, -S-, or -N-(R^6) wherein R^6 is hydrogen or -(C_1 - C_7)-alkyl, provided n is 1, or Y is -N(R^6)-N(R^6)- wherein R^6 is, independently of one another, hydrogen or -(C_1 - C_7)-alkyl, or -N=N-, provided n is 2; or

5. -(CH₂)_m-Y_n-(CH₂)_o-Het-group, in which m, n, and o are, independently of one another, 0, 1, or 2, provided that at least one of m, n, and o is not 0;

Het-group is unsubstituted or mono- to tri-substituted, independently of one another, by a substituent as defined by 1.1 to 1.19 above; and

Y is as defined above; or

R¹ and R², together with the carbon to which they are bonded, form

- 1. a -(C₃-C₇)-cycloalkyl, wherein cycloalkyl is unsubstituted or mono- to trisubstituted, independently of one another, by a substituent as defined by 1.1 to 1.19 above;
- 2. a -(C₃-C₇)-cycloalkyl, wherein cycloalkyl is unsubstituted or mono- to disubstituted, independently of one another, and fused to an aryl- or Hetgroup-ring, which itself is unsubstituted or mono- to tri-substituted, independently of one another, by a substituent as defined by 1.1 to 1.19 above;
- 3. a Het-group, wherein the Het-group is unsubstituted or mono- to trisubstituted, independently of one another, by a substituent as defined by 1.1 to 1.19 above; or
- 4. a keto-group, which may partially or totally exist in a hydrated state; provided that, when R¹ is as defined above under 3, 4, or 5, then R² is not directly bonded to formula I via a oxygen-, sulfur- or nitrogen-;
- B is 1. -N(R⁷)-(CH-(R⁸))_p-aryl, in which aryl is unsubstituted or mono- to tri-substituted, independently of one another, by a substituent as defined by 1.1 to 1.19 above; p is 0, 1, or 2;
 - R⁷ is 1.1 hydrogen;
 - 1.2 $-(C_1-C_7)$ -alkyl;
 - 1.3 -OH; or
 - 1.4 -N- $(R^6)_2$, wherein R^6 is, independently of one another, hydrogen or - $(C_1$ - $C_7)$ -alkyl;
 - R⁸ is 1.1 hydrogen;
 - 1.2 $-(C_1-C_7)$ -alkyl;
 - 1.3 $-(C_2-C_7)$ -alkenyl;
 - 1.4 $-(C_2-C_7)$ -alkynyl;
 - 1.5 $-(C_0-C_3)$ -alkyl- (C_3-C_7) -cycloalkyl;
 - 1.6 -CN;

- 1.7 aryl, aryl is unsubstituted or mono- or di-substituted,independently of one another, by a substituent as defined by 1.1 to 1.19 above;
- 1.8 a Het-group, wherein the Het-group is unsubstituted or monoor di- substituted, independently of one another, by a substituent as defined by 1.1 to 1.19 above;
- 1.9 -(CH-(\mathbb{R}^8))- forms a -(\mathbb{C}_3 - \mathbb{C}_7)-cycloalkyl derivative; or
- 1.10 $-(C_0-C_4)$ -alkyl-O- (C_1-C_7) -alkyl;
- 2. $-O-(CH-(R^8))_p$ -aryl, wherein aryl, R^8 , and p are as defined above;
- 3. -N(R⁷)-(CH-(R⁸))_p-Het-group, wherein the Het-group is unsubstituted or mono- or di-substituted, independently of one another, by a substituent as defined by 1.1 to 1.19 above, and R⁷, R⁸, and p are as defined above;
- 4. -N(R⁹)-N(R⁹)-(CH-(R⁸))_q-aryl, in which aryl is unsubstituted or mono- to tri-substituted, independently of one another, by a substituent as defined by 1.1 to 1.19 above; q is 0, 1, or 2;

 R^9 and $R^{9'}$ are, independently of one another, hydrogen, -(C_1 - C_7)-alkyl, or -(C_1 - C_3)-alkyl-aryl; and

R⁸ is as defined above;

5. $-\text{O-N}(R^9)$ - $(\text{CH-}(R^8))_q$ -aryl, in which

aryl is unsubstituted or mono- to tri-substituted, independently of one another, by a substituent as defined by 1.1 to 1.19 above;

q is 0, 1, or 2; and

R⁸ and R⁹ are as defined above;

6. $-N(R^9)-N(R^{9'})-(CH-(R^8))_q$ -Het-group, in which

Het-group is unsubstituted or mono- to tri-substituted, independently of one another, by a substituent as defined by 1.1 to 1.19 above;

q is 0, 1, or 2; and

R⁸, R⁹, and R⁹ are as defined above; or

7. $-\text{O-N}(R^9)$ - $(\text{CH-}(R^8))_q$ -Het-group, in which

Het-group is unsubstituted or mono- to tri-substituted, independently of one another, by a substituent as defined by 1.1 to 1.19 above;

q is 0, 1, or 2; and

R⁸ and R⁹ are as defined above;

in any stereoisomeric form or mixture thereof in any ratio, or a physiologically tolerable salt thereof.

2. (Previously presented) A compound of claim 1, wherein

A is represented by formula II, wherein

R³ is hydrogen;

R⁴ and R⁵, independently of one another, are hydrogen or halogen; and

 X_1 and X_2 , independently of one another, are carbon or nitrogen, but X_1 and X_2 are not both carbon;

 R^1 is hydrogen or -(C_1 - C_2)-alkyl;

 R^2 is hydrogen, phenyl, or -(C_1 - C_2)-alkyl-phenyl;

B is 1. -N(R⁷)-(CH-(R⁸))_p-aryl, in which aryl is indanyl, phenyl, tetralinyl, naphthalinyl, which are unsubstituted or mono- to di-substituted, independently of one another, by

- 1.1 Br, Cl, or F;
- 1.2 -CF₃;
- 1.3 $-NO_2$;
- 1.4 methylendioxyl;
- 1.5 -OH;
- 1.6 phenyl;
- 1.7 phenoxy;
- 1.8 benzyloxy;
- 1.9 -O-(C₁-C₇)-alkyl-phenyl, wherein phenyl is unsubstituted or or mono- to tri-substituted, independently of one another, by
 - 1.9.1 Br, Cl, or F;
 - 1.9.2 $-(C_1-C_4)$ -alkyl; or
 - 1.9.3 $-NO_2$;
- 1.10 $-C(O)-O-(C_1-C_4)$ -alkyl;
- 1.11 $-O-(C_1-C_4)$ -alkyl;
- 1.12 $-SO_2-(C_1-C_4)$ -alkyl;
- 1.13 -COOH;
- 1.14 $-(C_1-C_3)$ -alkyl; or

1.15 methoxyl;

p is 0, 1, or 2;

R⁷ is hydrogen;

- R⁸ is 1.1 hydrogen;
 - 1.2 $-(C_1-C_2)$ -alkyl;
 - 1.3 -CN;
 - 1.4 phenyl, wherein phenyl is unsubstituted or mono- or disubstituted, independently of one another, by methoxy or halogen;
 - 1.5 $-(C_0-C_2)$ -alkyl-O- (C_1-C_4) -alkyl;
 - 1.6 -(CH-(\mathbb{R}^8))- forms a -(C₄-C₆)-cycloalkyl derivative;
 - 1.7 cyclopropylmethyl; or
 - 1.8 ethynyl;
- 2. -O-(CH-(R⁸))_p-phenyl, wherein phenyl, R⁸, and p are as defined above;
- 3. $-N(R^9)-N(R^{9'})-(CH-(R^8))_q$ -Het-group, in which

Het-group is quinoxaline, imidazolyl, benzimidazolyl, oxazolyl, benzoxazolyl, thiazolyl, indazolyl, benzothiazolyl, indolyl, indolinyl, or pyridinyl, wherein Het-group is unsubstituted or mono- to di-substituted, independently of one another, by

- 1.1 Br, Cl, or F;
- 1.2 $-CF_3$;
- 1.3 $-NO_2$;
- 1.4 methylendioxyl;
- 1.5 -OH;
- 1.6 phenyl;
- 1.7 phenoxy;
- 1.8 benzyloxy;
- 1.9 -O-(C₁-C₇)-alkyl-phenyl, wherein phenyl is unsubstituted or or mono- to tri-substituted, independently of one another, by
 - 1.9.1 Br, Cl, or F;
 - 1.9.2 $-(C_1-C_4)$ -alkyl; or
 - 1.9.3 $-NO_2$;
- 1.10 $-C(O)-O-(C_1-C_4)$ -alkyl;

- 1.11 $-O-(C_1-C_4)$ -alkyl;
- 1.12 $-SO_2-(C_1-C_4)$ -alkyl;
- 1.13 -COOH;
- 1.14 $-(C_1-C_3)$ -alkyl; or
- 1.15 methoxyl;

R⁹ and R⁹ are, independently of one another, hydrogen or -(C₁-C₂)-alkyl; R⁸ is

- 1.1 hydrogen;
- 1.2 $-(C_1-C_2)$ -alkyl;
- 1.3 -CN;
- 1.4 phenyl, wherein phenyl is unsubstituted or mono- or disubstituted, independently of one another, by methoxy or halogen;
- 1.5 $-(C_0-C_2)$ -alkyl-O- (C_1-C_4) -alkyl;
- 1.6 -(CH-(\mathbb{R}^8))- forms a -(C₄-C₆)-cycloalkyl derivative;
- 1.7 cyclopropylmethyl; or
- 1.8 ethynyl; and

q is 0, 1, or 2; or

4. -N(R⁷)-(CH-(R⁸))_p-Het-group², wherein the Het-group² is imidazolyl, benzimidazolyl, oxazolyl, benzoxazolyl, thiazolyl, benzothiazolyl, indolyl, indazolyl, indolinyl, or pyridinyl, wherein Het-group² is unsubstituted or mono-substituted by Br, Cl, F, -CF₃, -NO₂, phenyl, phenoxy, methyl, benzyloxy, or methoxy;

p is 0, 1, or 2;

R⁷ is hydrogen;

- R⁸ is 1.1 hydrogen;
 - 1.2 $-(C_1-C_2)$ -alkyl;
 - 1.3 -CN;
 - 1.4 phenyl, wherein phenyl is unsubstituted or mono- or disubstituted, independently of one another, by methoxy or halogen;
 - 1.5 $-(C_0-C_2)$ -alkyl-O- (C_1-C_4) -alkyl;
 - 1.6 -(CH-(\mathbb{R}^8))- forms a -(C₄-C₆)-cycloalkyl derivative;
 - 1.7 cyclopropylmethyl; or

1.8 ethynyl.

3. (Original) A process for the preparation of a compound of claim 1, comprising linking the building blocks of formulae III, IV, and V

wherein R¹⁰ and R¹¹ are, independently of one another, a -OH group, an acid chloride, an ester or an activated ester, or a mixed anhydride, or any other activated species resulting from the reaction of the carboxylic acid with coupling reagents, and R¹, R², R³, R⁴, R⁵, R⁷, R⁸, X₁, X₂, B, p, and aryl are as defined for formula I, by means of forming in a manner known per se an amide bond between the carboxylic acid derivative depicted in formula III and the -NHR³ group depicted in formula IV and an amide bond or ester bond between the carboxylic acid derivative depicted in formula V.

- 4. (Previously presented) A pharmaceutical preparation, comprising one or more compounds of claim 1 and a pharmaceutically acceptable carrier.
- 5. (Canceled)
- 6. (Previously presented) A method for inhibiting or reducing blood clotting, comprising administering to a patient in need thereof an effective amount of one or more compounds of claim 1.

7 - 8. (Canceled)

- 9. (Previously presented) A method for treating restenoses, comprising administering to a patient in need thereof an effective amount of one or more compound of claim 1.
- 10. (Canceled)